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Robert E. Krebs
Thelen Reid & Priest, LLP
P.O. Box 640640
San Jose, CA 95164-0640

EXAMINER
FOX, JAMAL A

ART UNIT	PAPER NUMBER
2664	

DATE MAILED: 02/27/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/727,346	NEGUS, KEVIN J.
	Examiner	Art Unit	
	Jamal A. Fox	2664	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1) ☒ Responsive to communication(s) filed on <u>01 December 2005</u>.

2a) ☐ This action is **FINAL**.   2b) ☒ This action is non-final.

3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4) ☒ Claim(s) <u>1-53</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5) ☐ Claim(s) _____ is/are allowed.

6) ☒ Claim(s) <u>1-53</u> is/are rejected.

7) ☐ Claim(s) _____ is/are objected to.

8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9) ☐ The specification is objected to by the Examiner.

10) ☒ The drawing(s) filed on <u>02 December 2003</u> is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a) ☐ All   b) ☐ Some * c) ☐ None of:

      1. ☐ Certified copies of the priority documents have been received.

      2. ☐ Certified copies of the priority documents have been received in Application No. _____.

      3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)

2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3) ☒ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u>12/27/2005</u>.

4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____.

5) ☐ Notice of Informal Patent Application (PTO-152)

6) ☐ Other: _____.

DETAILED ACTION

Claim Objections

1.   Claim 53 is objected to because of the following informalities: Claim 53, line 17;

after "communication", --channel-- is spelled incorrectly. Appropriate correction is

required.

Claim 4 is objected to because of the following informalities: Claim 4, line 2, after

"time", --.-- needs to be inserted. Appropriate correction is required.

Claim 31 is objected to because of the following informalities: Claim 31, line 2,

after "time", --.-- needs to be inserted. Appropriate correction is required.

Claim 36 is objected to because of the following informalities: Claim 36, line 7,

after "oversufficient", --.-- needs to be inserted. Appropriate correction is required.

Claim 38 is objected to because of the following informalities: Claim 38, line 2,

after "time", --.-- needs to be inserted. Appropriate correction is required.

Claim 44 is objected to because of the following informalities: Claim 44, line 7,

after "insufficient", --.-- needs to be inserted. Appropriate correction is required.

Claim 46 is objected to because of the following informalities: Claim 46, line 2,

after "time", --.-- needs to be inserted. Appropriate correction is required.

Claim Rejections - 35 USC § 102

2.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

3.   Claims 1-51 are rejected under 35 U.S.C. 102(e) as being anticipated by Gao et al. (U.S. Patent Application Pub. No. 2004/0083287).

Referring to claim 1, Gao et al. discloses a wireless networking device (Fig. 2 and respective portions of the spec.) operating within a network protocol (protocol, page 5 [0054]) in which a reservation (reservation, page 5 [0054]) is made for transmission of data of one or more other wireless network devices (Fig. 1 ref. signs 102 and 114 and respective portions of the spec.), the wireless networking device comprising:

a dynamic reservation determination module (Fig. 2 ref. sign 214 and respective portions of the spec.), the module supplying a reservation parameter (RSVP, page 5 [0054]) associated with a reservation of a certain length (calculated, [0054]) for transmission of data from the wireless networking device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) to at least one of the one or more wireless network devices (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) by way of a direct communication channel (unicast data flows, [0054]) between the wireless networking device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) and the at least one of the one or more wireless network devices (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.), the transmission of data corresponding to multiple (multiple, page 5 [0054]) separate transmissions within the certain length (calculated, [0054]), the dynamic reservation

module (Fig. 2 ref. sign 214 and respective portions of the spec.) selectively changing

(new reservation updating ability, page 5 [0054]) the reservation parameter based on

the results of prior transmissions of data (collects, [0054]) along the same direct

communication channel.

Referring to claim 2, Gao et al. discloses the device of claim 1, wherein the

dynamic reservation determination module determines if a last transmission reservation

was oversufficient (sufficient, [0037]), and if the last transmission was oversufficient

(sufficient, [0037]), decreases (supply the requested level, [0037]) the reservation.

Referring to claim 3, Gao et al. discloses the device of claim 2, wherein the

dynamic reservation determination module decreases (supply the requested level,

[0037]) the reservation by a predefined amount (parameters are set [0037]).

Referring to claim 4, Gao et al. discloses the device of claim 3 wherein the

dynamic reservation module decreases (supply the requested level, [0037]) the

reservation by a predefined (predefined, [0062]) amount of time.

Referring to claim 5, Gao et al. discloses the device of claim 3 wherein the

dynamic reservation determination module decreases (supply the requested level,

[0037]) the reservation by an amount associated with a predefined amount (parameters

are set [0037]) of data.

Referring to claim 6, Gao et al. discloses the device of claim 2 wherein the

dynamic reservation determination module decreases (supply the requested level,

[0037]) the reservation by a computed (calculated, [0054]) amount.

Referring to claim 7, Gao et al. discloses the device of claim 6 wherein the computed amount is obtained through filtering (filter, [0039] & [0040]).

Referring to claim 8, Gao et al. discloses the device of claim 1, wherein the first reservation is based on a predefined (calculated, [0054]) default value.

Referring to claim 9, Gao et al. discloses the device of claim 1 wherein the first reservation is based on a value determined by prior operation (collects, [0054]).

Referring to claim 10, Gao et al. discloses the device of claim 1, wherein the dynamic reservation determination module determines if a last transmission reservation was insufficient (sufficient, [0037]), and if the last transmission reservation was insufficient (sufficient, [0037]), increases (supply the requested level, [0037]) the reservation.

Referring to claim 11, Gao et al. discloses the device of claim 10 wherein the dynamic reservation determination module increases (supply the requested level, [0037]) the reservation by a predefined amount (parameters are set [0037]).

Referring to claim 12, Gao et al. discloses the device of claim 11 wherein the dynamic reservation determination module increases (supply the requested level, [0037]) the reservation time by a predefined (predefined, [0062]) amount.

Referring to claim 13, Gao et al. discloses the device of claim 11 wherein the dynamic reservation determination module increases (supply the requested level, [0037]) the reservation time by a time associated with a predefined amount (parameters are set [0037]) of data.

Referring to claim 14, Gao et al. discloses the device of claim 10 wherein the dynamic reservation determination module increases (supply the requested level, [0037]) the reservation by a computed (calculated, [0054]) amount.

Referring to claim 15, Gao et al. discloses the device of claim 14 wherein the computed amount is obtained through filtering (filter, [0039] & [0040]).

Referring to claim 16, Gao et al. discloses a wireless networking device operating within a network protocol (protocol, page 5 [0054]) in which a reservation (reservation, page 5 [0054]) is made for transmission of data with a dynamically updateable (new reservation updating ability, page 5 [0054]) reservation parameter, the wireless networking device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) comprising: a utilization module (Fig. 2 ref. sign 216 and respective portions of the spec.), the utilization module determining the efficiency (efficiently, [0052]) characteristics of the reservation parameter (RSVP, page 5 [0054]), and initiating a signal (signaling, [0052] & [0067]) to alter the reservation parameter,

wherein the reservation parameter (RSVP, [0054]) relates to the transmission of data from the wireless networking device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) to at least one other wireless network device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) by way of a direct communication channel (unicast data flows, [0054]) between the wireless networking device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) and the at least one other wireless network device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.), and wherein said altering (new reservation

updating ability, page 5 [0054]) is based on a prior transmission (collects, [0054]) of

data along the same direct communication channel (unicast data flows, [0054]).

Referring to claim 17, Gao et al. discloses a wireless networking device (Figure

1, ref. signs 102, 106 and 114 and respective portions of the spec.) operating within a

network protocol (protocol, page 5 [0054]) in which a reservation (reservation, page 5

[0054]) is made for transmission of data, the wireless networking device (Figure 1, ref.

signs 102, 106 and 114 and respective portions of the spec.) comprising:

a utilization module (Fig. 2 ref. sign 216 and respective portions of the spec.), the

utilization module determining the efficiency (efficiently, [0052]) characteristics of the

reservation, and initiating a signal (signaling, [0052] & [0067]) associated with the

determined efficiency; and

a dynamic reservation determination module (Fig. 2 ref. sign 214 and respective

portions of the spec.), communicatively coupled to the utilization module, that supplies a

reservation parameter (RSVP, page 5 [0054]) for making a reservation of a certain

length (calculated, [0054]), the dynamic reservation module operable to alter (new

reservation updating ability, page 5 [0054]) the reservation parameter (RSVP, page 5

[0054]) in response to the signal (signaling, [0052] & [0067]) generated by the utilization

module,

wherein the reservation parameter (RSVP, page 5 [0054]) relates to the

transmission of data from the wireless networking device (Figure 1, ref. signs 102, 106

and 114 and respective portions of the spec.) to at least one other wireless network

device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) by

way of a direct communication channel (unicast data flows, [0054]) between the

wireless networking device (Figure 1, ref. signs 102, 106 and 114 and respective

portions of the spec.) and the at least one other wireless network device (Figure 1, ref.

signs 102, 106 and 114 and respective portions of the spec.), and wherein said altering

(new reservation updating ability, page 5 [0054]) is based on a prior transmission

(collects, [0054]) of data along the same direct communication channel (unicast data

flows, [0054]).

Referring to claim 18, Gao et al. discloses the wireless device of claim 17

wherein the full transmission of data is made with multiple (multiple, [0001], [0009],

[0011], [0014], [0015], [0016], [0017], [0018], [0019], [0023], [0024], [0025], [0026],

[0034], [0048] and [0055]) transmissions of packets.

Referring to claim 19, Gao et al. discloses a method of altering (new reservation

updating ability, page 5 [0054]) the operating characteristics of a wireless networking

connection associated with a wireless network device (Figure 1, ref. signs 102, 106 and

114 and respective portions of the spec.), the wireless network device (Figure 1, ref.

signs 102, 106 and 114 and respective portions of the spec.) operable to transmit data

to another wireless network device (Figure 1, ref. signs 102, 106 and 114 and

respective portions of the spec.) under a network protocol that has a reservation, the

reservation associated with a reservation parameter (RSVP, page 5 [0054]), the method

comprising:

monitoring (monitoring, [0047]) the transmission;

determining the utilization of the transmission (get the information of the service, [0052]);

selectively, based on the step of determining, altering (new reservation updating ability, page 5 [0054]) the reservation parameter (RSVP, page 5 [0054]); and

wherein the full transmission of data occurs with multiple transmissions of packets, wherein the reservation parameter (RSVP, page 5 [0054]) relates to the transmission of data from the wireless networking device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) to at least one other wireless network device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) by way of a direct communication channel (unicast data flows, [0054]) between the wireless networking device and the at least one other wireless network device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.), and wherein said altering (new reservation updating ability, page 5 [0054]) is based on a prior transmission (collects, [0054]) of data along the same direct communication channel (unicast data flows, [0054]).

Referring to claim 20, Gao et al. discloses a method for operating a wireless networking device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) that communicates data under a network protocol, the network protocol including a reservation (reservation, page 5 [0054]) for a transmission of data to one or more other wireless network devices (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.), the method comprising:

supplying a reservation parameter (RSVP, page 5 [0054]) associated with a

particular reservation amount relating to the transmission of data from the wireless

networking device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the

spec.) to at least one other wireless networking device (Figure 1, ref. signs 102, 106

and 114 and respective portions of the spec.) by way of a direct communication channel

(unicast data flows, [0054]) between the wireless networking device (Figure 1, ref. signs

102, 106 and 114 and respective portions of the spec.) and the at least one other

wireless networking device (Figure 1, ref. signs 102, 106 and 114 and respective

portions of the spec.); and

selectively changing the reservation parameter (RSVP, page 5 [0054]) based on

the results of prior transmissions,

wherein said changing is based on a prior transmission (collects, [0054]) of data

along the same direct communication channel (unicast data flows, [0054]).

Referring to claim 21, Gao et al. discloses the method of claim 20, further

comprising:

determining if a last transmission reservation was oversufficient (sufficient,

[0037]); and the step of selectively changing comprising:

selectively, if the last transmission was over sufficient (sufficient, [0037]),

decreasing (supply the requested level, [0037]) the reservation.

Referring to claim 22, Gao et al. discloses the method of claim 21, the step of

selectively decreasing (supply the requested level, [0037]) comprising:

decreasing (supply the requested level, [0037]) the reservation by a predefined

amount (parameters are set [0037]).

Referring to claim 23, Gao et al. discloses the method of claim 22, wherein the

predefined amount is a predefined (predefined, [0062]) amount of time.

Referring to claim 24, Gao et al. discloses the method of claim 22, wherein the

predefined amount (parameters are set [0037]) is associated with a predefined amount

(parameters are set [0037]) of data based on operating characteristics (characteristic,

[0008] and [0039]) of the networking device.

Referring to claim 25, Gao et al. discloses the method of claim 21, the step of

selectively decreasing (supply the requested level, [0037]) comprising:

decreasing (supply the requested level, [0037]) the reservation by a computed

amount.

Referring to claim 26, Gao et al. discloses the method of claim 25 wherein the

computed (calculated, [0054]) amount is obtained through filtering (filter, [0039] &

[0040]).

Referring to claim 27, Gao et al. discloses the method of claim 20 further

comprising:

prior to the first transmission, supplying a first reservation based on a predefined

(calculated, [0054]) default value.

Referring to claim 28, Gao et al. discloses the method of claim 20 further

comprising: prior to the first transmission, supplying a first reservation a value based on

prior operation (collects, [0054]).

Referring to claim 29, Gao et al. discloses the method of claim 20, further comprising:

determining if a last transmission reservation was insufficient (sufficient, [0037]); and

the step of selectively changing comprising:

selectively, if the last transmission was insufficient (sufficient, [0037]), increasing (supply the requested level, [0037]) the reservation.

Referring to claim 30, Gao et al. discloses the method of claim 29, the step of selectively increasing (supply the requested level, [0037]) comprising:

increasing (supply the requested level, [0037]) the reservation by a predefined amount (parameters are set [0037]).

Referring to claim 31, Gao et al. discloses the method of claim 30 wherein the predefined amount is a predefined (predefined, [0062]) amount of time.

Referring to claim 32, Gao et al. discloses the method of claim 30, wherein the predefined amount is associated with a predefined amount of data (parameters are set [0037]) based on operating characteristics (characteristic, [0008] and [0039]) of the networking device.

Referring to claim 33, Gao et al. discloses the method of claim 29, the step of selectively increasing comprising:

increasing the reservation by a computed (calculated, [0054]) amount.

Referring to claim 34, Gao et al. discloses the method of claim 25 wherein the computed (calculated, [0054]) amount is obtained through filtering (filter, [0039] & [0040]).

Referring to claim 35, Gao et al. discloses a wireless networking device operating within a network protocol (protocol, page 5 [0054]) in which a reservation (reservation, page 5 [0054]) is made for transmission of data, the wireless networking device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) comprising:

utilization monitoring means (Fig. 2 ref. sign 216 and respective portions of the spec.), the utilization monitoring means determining the efficiency (efficiently, [0052]) characteristics of a transmission, and initiating a signal (signaling, [0052] & [0067]) associated with the determined efficiency; and

means for selectively determining a reservation (Fig. 2 ref. sign 214 and respective portions of the spec.), communicatively coupled to the utilization monitoring means, that supplies a reservation parameter (RSVP, page 5 [0054]) for making a reservation of a certain length (calculated, [0054]), the means for selectively determining a reservation operable to alter (new reservation updating ability, page 5 [0054]) the reservation parameter in response to the signal (signaling, [0052] & [0067]) generated by the utilization monitoring means,

wherein the reservation parameter (RSVP, page 5 [0054]) relates to the transmission of data from the wireless networking device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) to at least one other wireless network device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) by

way of a direct communication channel (unicast data flows, [0054]) between the

wireless networking device (Figure 1, ref. signs 102, 106 and 114 and respective

portions of the spec.) and the at least one other wireless network device, and wherein

said altering (new reservation updating ability, page 5 [0054]) is based on a prior

transmission (collects, [0054]) of data along the same direct communication channel

(unicast data flows, [0054]).

.Referring to claim 36, Gao et al. discloses the device of claim 35, wherein:

the utilization monitoring means (Fig. 2 ref. sign 216 and respective portions of

the spec.) comprising:

a means for determining if a last transmission reservation was oversufficient

(sufficient, [0037]); and

the means for selectively determining a reservation comprising:

means for decreasing (supply the requested level, [0037]) the reservation based

upon if the last transmission was oversufficient (sufficient, [0037]).

Referring to claim 37, Gao et al. discloses the device of claim 36, wherein the

means for decreasing (supply the requested level, [0037]) is operable to decrease

(supply the requested level, [0037]) the reservation by a predefined amount (parameters

are set [0037]).

Referring to claim 38, Gao et al. discloses the device of claim 37 wherein the

predefined amount is a predefined (predefined, [0062]) amount of time.

Referring to claim 39, Gao et al. discloses the device of claim 37 wherein the

predefined (parameters are set [0037]) amount is associated with a predefined

(parameters are set [0037]) amount of data based on operating characteristics

(characteristic, [0008] and [0039]) of the networking device.

Referring to claim 40, Gao et al. discloses the device of claim 35, the means for

decreasing (supply the requested level, [0037]) comprising:

means for decreasing (supply the requested level, [0037]) the reservation by a

computed (calculated, [0054]) amount.

Referring to claim 41, Gao et al. discloses the device of claim 40 wherein the

computed amount is obtained through filtering (filter, [0039] & [0040]).

Referring to claim 42, Gao et al. discloses the device of claim 35 further

comprising means for supplying a first reservation, prior to the first transmission, the first

reservation based on a predefined (calculated, [0054]) default value.

Referring to claim 43, Gao et al. discloses the device of claim 35 further

comprising means for supplying a first reservation, prior to the first transmission, the first

reservation based on a value determined by previous operation (collects, [0054]) of the

device.

Referring to claim 44, Gao et al. discloses the device of claim 35, wherein:

the utilization monitoring means (Fig. 2 ref. sign 216 and respective portions of

the spec.) comprising:

a means for determining if a last transmission reservation was insufficient

(sufficient, [0037]); the means for selectively determining a reservation comprising:

means for increasing (supply the requested level, [0037]) the reservation based

upon if the last transmission was insufficient (sufficient, [0037]).

Referring to claim 45, Gao et al. discloses the device of claim 44, wherein the means for increasing is operable to increase (supply the requested level, [0037]) the reservation by a predefined (parameters are set [0037]) amount.

Referring to claim 46, Gao et al. discloses the device of claim 45 wherein the predefined amount is a predefined (predefined, [0062]) amount of time.

Referring to claim 47, Gao et al. discloses the device of claim 45 wherein the predefined (parameters are set [0037]) amount is associated with a predefined (parameters are set [0037]) amount of data based on operating characteristics (characteristic, [0008] and [0039]) of the networking device.

Referring to claim 48, Gao et al. discloses the device of claim 44, the means for increasing (supply the requested level, [0037]) comprising:

means for increasing (supply the requested level, [0037]) the reservation by a computed (calculated, [0054]) amount.

Referring to claim 49, Gao et al. discloses the device of claim 48 wherein the computed (calculated, [0054]) amount is obtained through filtering (filter, [0039] & [0040]).

Referring to claim 50, Gao et al. discloses a wireless networking device operating within a network protocol (protocol, page 5 [0054]) in which a reservation (reservation, page 5 [0054]) is made for transmission of data, the wireless networking device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) communicating to two or more wireless networking devices (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.), the wireless networking device comprising:

a utilization module (Fig. 2 ref. sign 216 and respective portions of the spec.), the

utilization module determining the efficiency (efficiently, [0052]) characteristics of a

transmission, and initiating a signal (signaling, [0052] & [0067]) associated with the

determined efficiency; .

a dynamic reservation module (Fig. 2 ref. sign 214 and respective portions of the

spec.), communicatively coupled to the utilization module (Fig. 2 ref. sign 216 and

respective portions of the spec.), that supplies a reservation parameter (RSVP, page 5

[0054]) for making reservation of a certain length (calculated, [0054]), the dynamic

reservation module operable to alter (new reservation updating ability, page 5 [0054])

the reservation parameter in response to the signal (signaling, [0052] & [0067])

generated by the utilization module (Fig. 2 ref. sign 216 and respective portions of the

spec.);

the wireless networking device (Fig. 1 ref. sign 114 and respective portions of the

spec.) using and selectively altering (new reservation updating ability, page 5 [0054]) a

first dynamic reservation parameter when communicating with a first other wireless

networking device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the

spec.); and

the wireless networking device (Figure 1, ref. signs 102, 106 and 114 and

respective portions of the spec.) using and selectively altering (new reservation

updating ability, page 5 [0054]) a second dynamic reservation parameter (RSVP, page

5 [0054]) when communicating with a second other wireless networking device (Figure

1, ref. signs 102, 106 and 114 and respective portions of the spec.),

wherein the reservation parameter (RSVP, page 5 [0054]) relates to the

transmission of data from the wireless networking device (Figure 1, ref. signs 102, 106

and 114 and respective portions of the spec.) to at least one other wireless network

device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the spec.) by

way of a direct communication channel (unicast data flows, [0054]) between the

wireless networking device (Figure 1, ref. signs 102, 106 and 114 and respective

portions of the spec.) and the at least one other wireless network device (Figure 1, ref.

signs 102, 106 and 114 and respective portions of the spec.), and wherein said altering

(new reservation updating ability, page 5 [0054]) is based on a prior transmission

(collects, [0054]) of data along the same direct communication channel (unicast data

flows, [0054]).

Referring to claim 51, Gao et al. discloses a wireless networking device (Figure

1, ref. signs 102, 106 and 114 and respective portions of the spec.) operating with a

network protocol in which a reservation is made for transmission of data to one or more

other wireless networking devices (Figure 1, ref. signs 102, 106 and 114 and respective

portions of the spec.), the wireless networking device (Figure 1, ref. signs 102, 106 and

114 and respective portions of the spec.) comprising:

a reservation determination module (Fig. 2 ref. sign 214 and respective portions

of the spec.), the module supplying a reservation parameter associated with a

reservation of a certain length (calculated, [0054]); and

the reservation parameter (RSVP, page 5 [0054]) associated with the

transmission of data in multiple packets within the associated reservation,

the reservation parameter relating to transmission of data from the wireless

networking device (Figure 1, ref. signs 102, 106 and 114 and respective portions of the

spec.) to at least one or more other wireless networking devices (Figure 1, ref. signs

102, 106 and 114 and respective portions of the spec.) by way of a direct

communication channel (unicast data flows, [0054]) between the wireless networking

device and the one or more other wireless networking devices (Figure 1, ref. signs 102,

106 and 114 and respective portions of the spec.) and being alterable (new reservation

updating ability, page 5 [0054]) based on a prior transmission (collects, [0054]) of data

along the same direct communication channel (unicast data flows, [0054]).

4.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5.   Claims 52 and 53 are rejected under 35 U.S.C. 102(b) as being anticipated by

Zheng et al. (U.S. Patent Application Pub. No. 2002/0150062).

Referring to claim 52, Zheng et al. discloses a wireless networking device

(wireless device, [0004]) operating with a network protocol in which a reservation is

made for transmission of a dataset to one or more other wireless network devices, the

wireless networking device comprising:

a transmitter (routing module, [0039] and [0042]) that transmits the dataset to the

one or more other wireless network devices, the transmitted dataset being transmitted

in multiple groupings of data;

a data queue (queued, [0044]), communicatively coupled to the transmitter, that

holds the data to be transmitted;

a reservation determination module (reservation module, [0025], [0039] and

[0040]), the module supplying a reservation parameter associated with a reservation of

a length, the length associated with an estimated length to transmit the entire multiple

groupings of data;

wherein the reservation parameter (RSVP message, [0043]) is operable to

supply the reservation parameter prior to all data in the dataset being present in the

data queue (queued, [0044]), and wherein the reservation parameter relates to

transmission of data from the wireless networking device (mobile node, [0043]) to at

least one of the one or more other wireless networking devices (node, [0043]) by way of

a direct communication channel (channel, [0043]) between the wireless networking

device and the one or more other wireless networking devices (see Figures 2-4 ref.

signs 30 and 48 and respective portions of the spec.) and is alterable base on a prior

transmission (previously reserved, [0044]) of data along the same direct transmission

channel (channel, [0043]).

Referring to claim 53, Zheng et al. discloses a wireless networking device

(wireless device, [0004]) operating with a network protocol in which a reservation is

made for transmission of a dataset to one or more other wireless network devices, the

wireless networking device comprising:

a transmitter (routing module, [0039] and [0042]) that transmits the dataset to the

one or more other wireless network devices, the transmitted dataset being transmitted

in multiple groupings of data;

a data queue (queued, [0044]), communicatively coupled to the transmitter, that

holds the data to be transmitted;

a reservation determination module (reservation module, [0025], [0039] and

[0040]), the module supplying a reservation parameter associated with a reservation of

a length, the length associated with an estimated length to transmit the entire multiple

groupings of data;

wherein the reservation parameter (RSVP message, [0043]) corresponds to a

dataset size larger than can be store at one time in the data queue (queued, [0044]),

wherein the reservation parameter (RSVP message, [0043]) relates to transmission of

data from the wireless networking device to at least one of the one or more other

wireless networking devices (see Figures 2-4 ref. signs 30 and 48 and respective

portions of the spec.) by way of a direct communication channel (channel, [0043])

between the wireless networking device (mobile node, [0043]) and the one or more

other wireless networking devices (node, [0043]), and wherein the reservation

parameter is alterable based on a prior transmission (previously reserved, [0044]) of

data along the same direct communication channel (channel, [0043]).

6.   Claims 1, 19, 20 and 51-53 are rejected under 35 U.S.C. 102(b) as being

anticipated by Whitehead (Distributed Packet Dynamic Resource Allocation (DRA) for

Wireless Networks).

Referring to claim 1, Whitehead discloses a wireless networking device (station,

page 111, col. 2, 3rd paragraph) operating within a network protocol (MAC, page 112,

col. 1, 5th paragraph) in which a reservation (allocation, page 111, col. 2, 5th paragraph)

is made for transmission (transmission, page 111, col. 2, 3rd paragraph) of data of one

or more other wireless network devices (all stations, page 111, col. 2, 3rd paragraph),

the wireless networking device comprising:

a dynamic reservation determination module (DRA, page 111, col. 2, 5th

paragraph), the module supplying a reservation parameter (RTS/CTS, Page 111, col. 2,

3rd paragraph) associated with a reservation of a certain length (length, page 112, col.

2, paragraph 6 and 7) for transmission of data from the wireless networking device

(station, page 111, col. 2, 3rd paragraph) to at least one of the one or more wireless

network devices (all stations, page 111, col. 2, 3rd paragraph) by way of a direct

communication channel (channel, page 112, col. 1, 6th paragraph, page 113, col. 2, 7th

paragraph and page 114, col. 1, 2nd paragraph) between the wireless networking device

(station, page 111, col. 2, 3rd paragraph) and the at least one of the one or more

wireless network devices (all stations, page 111, col. 2, 3rd paragraph), the transmission

of data corresponding to multiple (multichannel, page 112, col. 1, 6th paragraph)

separate transmissions within the certain length (length, page 112, col. 2, paragraph 6

and 7), the dynamic reservation module (DRA, page 111, col. 2, 5th paragraph)

selectively changing (issues, page 111, col. 2, 3rd paragraph) the reservation parameter

(RTS/CTS, Page 111, col. 2, 3rd paragraph) based on the results of prior transmissions

(transmission, page 111, col. 2, 3rd paragraph) of data along the same direct

communication channel (channel, page 112, col. 1, 6th paragraph, page 113, col. 2, 7th

paragraph and page 114, col. 1, 2nd paragraph).

Referring to claim 19, Whitehead discloses a method of altering (issues, page

111, col. 2, 3rd paragraph) the operating characteristics of a wireless networking

connection associated with a wireless network device (station, page 111, col. 2, 3rd

paragraph), the wireless network device (station, page 111, col. 2, 3rd paragraph)

operable to transmit data to another wireless network device (all stations, page 111, col.

2, 3rd paragraph) under a network protocol that has a reservation, the reservation

associated with a reservation parameter (RTS/CTS, page 111, col. 2, 3rd paragraph),

the method comprising:

monitoring (reviews, measures, and observes, page 112, col. 2) the

transmission;

determining the utilization (efficiency, page 112, col. 1, 1st paragraph) of the

transmission;

selectively, based on the step of determining, altering (issues, page 111, col. 2,

3rd paragraph) the reservation parameter (RTS/CTS, Page 111, col. 2, 3rd paragraph);

and

wherein the full transmission of data occurs with multiple (multichannel, page

112, col. 1, 6th paragraph) transmissions of packets, wherein the reservation parameter

(RTS/CTS, Page 111, col. 2, 3rd paragraph) relates to the transmission of data from the wireless networking device (station, page 111, col. 2, 3rd paragraph) to at least one other wireless network device (all stations, page 111, col. 2, 3rd paragraph) by way of a direct communication channel (channel, page 112, col. 1, 6th paragraph, page 113, col. 2, 7th paragraph and page 114, col. 1, 2nd paragraph) between the wireless networking device and the at least one other wireless network device (all stations, page 111, col. 2, 3rd paragraph), and wherein said altering (issues, page 111, col. 2, 3rd paragraph) is based on a prior transmission (transmission, page 111, col. 2, 3rd paragraph) of data along the same direct communication channel (channel, page 112, col. 1, 6th paragraph, page 113, col. 2, 7th paragraph and page 114, col. 1, 2nd paragraph).

Referring to claim 20, Whitehead discloses a method for operating a wireless networking device (station, page 111, col. 2, 3rd paragraph) that communicates data under a network protocol, the network protocol including a reservation (RTS/CTS, Page 111, col. 2, 3rd paragraph) for a transmission of data to one or more other wireless network devices (all stations, page 111, col. 2, 3rd paragraph), the method comprising:

supplying a reservation parameter (RTS/CTS, Page 111, col. 2, 3rd paragraph) associated with a particular reservation amount relating to the transmission of data from the wireless networking device (station, page 111, col. 2, 3rd paragraph) to at least one other wireless networking device (all stations, page 111, col. 2, 3rd paragraph) by way of a direct communication channel (channel, page 112, col. 1, 6th paragraph, page 113, col. 2, 7th paragraph and page 114, col. 1, 2nd paragraph) between the wireless

networking device (station, page 111, col. 2, 3rd paragraph) and the at least one other

wireless networking device (all stations, page 111, col. 2, 3rd paragraph); and

selectively changing (issues, page 111, col. 2, 3rd paragraph) the reservation

parameter (RTS/CTS, Page 111, col. 2, 3rd paragraph) based on the results of prior

transmissions (transmission, page 111, col. 2, 3rd paragraph),

wherein said changing is based on a prior transmission (transmission, page 111,

col. 2, 3rd paragraph) of data along the same direct communication channel (channel,

page 112, col. 1, 6th paragraph, page 113, col. 2, 7th paragraph and page 114, col. 1, 2nd

paragraph).

Referring to claim 51, Whitehead discloses a wireless networking device (station,

page 111, col. 2, 3rd paragraph) operating with a network protocol in which a reservation

is made for transmission of data to one or more other wireless networking devices (all

stations, page 111, col. 2, 3rd paragraph), the wireless networking device (station, page

111, col. 2, 3rd paragraph) comprising:

a reservation determination module (DRA, page 111, col. 2, 5th paragraph), the

module supplying a reservation parameter associated with a reservation of a certain

length (length, page 112, col. 2, paragraph 6 and 7); and

the reservation parameter (RTS/CTS, Page 111, col. 2, 3rd paragraph)

associated with the transmission of data in multiple packets within the associated

reservation,

the reservation parameter (RTS/CTS, Page 111, col. 2, 3rd paragraph) relating to

transmission of data from the wireless networking device (station, page 111, col. 2, 3rd

paragraph) to at least one or more other wireless networking devices (all stations, page 111, col. 2, 3rd paragraph) by way of a direct communication channel (channel, page 112, col. 1, 6th paragraph, page 113, col. 2, 7th paragraph and page 114, col. 1, 2nd paragraph) between the wireless networking device (station, page 111, col. 2, 3rd paragraph) and the one or more other wireless networking devices (all stations, page 111, col. 2, 3rd paragraph) and being alterable (issues, page 111, col. 2, 3rd paragraph) based on a prior transmission (transmission, page 111, col. 2, 3rd paragraph) of data along the same direct communication channel (channel, page 112, col. 1, 6th paragraph, page 113, col. 2, 7th paragraph and page 114, col. 1, 2nd paragraph).

Referring to claim 52, Whitehead discloses a wireless networking device (station, page 111, col. 2, 3rd paragraph) operating with a network protocol in which a reservation is made for transmission of a dataset to one or more other wireless network devices (all stations, page 111, col. 2, 3rd paragraph), the wireless networking device (station, page 111, col. 2, 3rd paragraph) comprising:

a transmitter (sender, page 112, col. 2) that transmits the dataset to the one or more other wireless network devices, the transmitted dataset being transmitted in multiple (multichannel, page 112, col. 1, 6th paragraph) groupings of data;

a data queue (queued, page 112, col. 1, 2nd paragraph), communicatively coupled to the transmitter, that holds the data to be transmitted;

a reservation determination module (DRA, page 111, col. 2, 5th paragraph), the module supplying a reservation parameter associated with a reservation of a length (length, page 112, col. 2, paragraph 6 and 7), the length associated with an estimated

length to transmit the entire multiple (multichannel, page 112, col. 1, 6th paragraph)

groupings of data;

wherein the reservation parameter (RTS/CTS, Page 111, col. 2, 3rd paragraph) is

operable to supply the reservation parameter (RTS/CTS, Page 111, col. 2, 3rd

paragraph) prior to all data in the dataset being present in the data queue (queued,

[0044]), and wherein the reservation parameter relates to transmission of data from the

wireless networking device (station, page 111, col. 2, 3rd paragraph) to at least one of

the one or more other wireless networking devices (all stations, page 111, col. 2, 3rd

paragraph) by way of a direct communication channel (channel, page 112, col. 1, 6th

paragraph, page 113, col. 2, 7th paragraph and page 114, col. 1, 2nd paragraph)

between the wireless networking device and the one or more other wireless networking

devices (all stations, page 111, col. 2, 3rd paragraph) and is alterable base on a prior

transmission (transmission, page 111, col. 2, 3rd paragraph) of data along the same

direct transmission channel (channel, page 112, col. 1, 6th paragraph, page 113, col. 2,

7th paragraph and page 114, col. 1, 2nd paragraph).

Referring to claim 53, Whitehead discloses a wireless networking device (station,

page 111, col. 2, 3rd paragraph) operating with a network protocol (MAC, page 112, col.

1, 5th paragraph) in which a reservation is made for transmission of a dataset to one or

more other wireless network devices (all stations, page 111, col. 2, 3rd paragraph), the

wireless networking device (station, page 111, col. 2, 3rd paragraph) comprising:

a transmitter (sender, page 112, col. 2) that transmits the dataset to the one or

more other wireless network devices, the transmitted dataset being transmitted in

multiple groupings of data;

a data queue (queued, page 112, col. 1, 2nd paragraph), communicatively

coupled to the transmitter, that holds the data to be transmitted;

a reservation determination module (DRA, page 111, col. 2, 5th paragraph), the

module supplying a reservation parameter associated with a reservation of a length

(length, page 112, col. 2, paragraph 6 and 7), the length associated with an estimated

length to transmit the entire multiple (multichannel, page 112, col. 1, 6th paragraph)

groupings of data;

wherein the reservation parameter (RTS/CTS, Page 111, col. 2, 3rd paragraph)

corresponds to a dataset size larger than can be store at one time in the data queue

(queued, page 112, col. 1, 2nd paragraph), wherein the reservation parameter

(RTS/CTS, Page 111, col. 2, 3rd paragraph) relates to transmission of data from the

wireless networking device to at least one of the one or more other wireless networking

devices (all stations, page 111, col. 2, 3rd paragraph) by way of a direct communication

channel (channel, page 112, col. 1, 6th paragraph, page 113, col. 2, 7th paragraph and

page 114, col. 1, 2nd paragraph) between the wireless networking device (station, page

111, col. 2, 3rd paragraph) and the one or more other wireless networking devices (all

stations, page 111, col. 2, 3rd paragraph), and wherein the reservation parameter

(RTS/CTS, Page 111, col. 2, 3rd paragraph) is alterable based on a prior transmission

(transmission, page 111, col. 2, 3rd paragraph) of data along the same direct

communication channel (channel, page 112, col. 1, 6th paragraph, page 113, col. 2, 7th

paragraph and page 114, col. 1, 2nd paragraph).

Response to Arguments

7.   Applicant's arguments filed 12/1/2005 have been fully considered but they are

not persuasive. Applicant argued that Gao et al. does not disclose defining the

reservation parameter as relating to transmission of data by way of direct

communication channel between two wireless networking nodes and being alterable

based on prior transmissions of data along the same communication channel.

However, one skilled in the art would recognize that a direct communication channel is

a unicast data flow as in [0054] and being alterable is the updating ability as in [0054].

Conclusion

8.   Any response to this action should be mailed to:

> Commissioner for Patents
> P.O. Box 1450
> Alexandria, VA 22313-1450

> **or faxed to:**

> (571) 273-8300, (for formal communications intended for entry)

9.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Jamal A. Fox whose telephone number is (571) 272-

3143. The examiner can normally be reached on Monday-Friday 8:30 AM - 7:00 PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Seema Rao can be reached on (571) 272-3174. The fax phone number for

the organization where this application or proceeding is assigned is (571) 273-8300.

Any inquiry of a general nature or relating to the status of this application or

proceeding should be directed to 2600 Customer Service whose telephone number is

(571) 272-2600.

Jamal A. Fox

FRANK DUONG
PRIMARY EXAMINER